Geriatric medicine and geriatricians in the UK. How they relate to acute and general internal medicine and what the future might hold?

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The Royal College of Physicians and its Future Hospitals Commission has a renewed focus on general internal medicine. But in 2015, most is in effect either acute medicine or geriatric medicine. Acute physicians and 'organ specialists' looking after inpatients on specialty wards or at the acute hospital 'front door' will need sufficient skills in geriatric medicine, rehabilitation, discharge planning and palliative care, as frailty, dementia and complex comorbidities may complicate the care of older patients with predominant speciality-defining complaints. In an era where we are urged to focus on patientcentred care, patients' preference for continuity and 'wholestay', consultants must be recognised and respected. Ideally, this will require increasing numbers of geriatricians and acute physicians, more age attuned training for all; a shift in values and status. This should be backed by adequate capacity and rapid access to social and intermediate care services outside hospital, as well as adequate multidisciplinary staff and skills within the acute hospital to ensure that older patients' needs beyond the immediate complaints are not neglected. Meanwhile, geriatric medicine itself has diversified into specialised, community and interface roles, aligned with the integration agenda, and continues to contribute substantially to acute, general and stroke medicine. These developments are described here.

KEYWORDS: Geriatrics, general, acute medicine and workforce

Introduction – how we got here

When the NHS was founded in 1948, around 48% of people died before 65. Now, that figure is around 12%, with men and women at 65 expected to live on average 18 and 20 more years, respectively. The 'oldest old' (over 85) are the fastest growing age demographic. By 2030, around 1 in 5 of the population will be over 65 and life expectancy at 65 is projected to be 88 for men and 91 for women.

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Medical specialities in those early post-war years tended to focus on short-lived, infectious or 'single-organ' diseases generally affecting people below retirement age. This has indirectly coloured the way our services, training and specialities are configured to this day.

UK geriatric medicine came to prominence in the 1940s with the pioneering work of Warren, Amulree, Howell and Exton-Smith among others, and with the founding of the British Geriatrics Society (BGS).⁵ Its pioneers demonstrated the value of specialised and skilled assessment of older patients both to those individuals and to hospitals. Back then, geriatricians were far from the mainstream of acute adult medicine and centred in long-stay facilities.⁶ We are now the largest UK internal medicine speciality with at least 1,350 consultants, with most consultants dually accredited in general internal medicine (GiM) and many also in stroke or acute medicine.⁷

The BGS has defined geriatric medicine thus: 'a branch of GiM that is concerned with the clinical, preventative, remedial and social aspects of illness in old age. The challenges of frailty, complex comorbidity, different patterns of disease presentation, slower response to treatment and requirements for rehabilitation or social support require special medical skills'. This is explored in more detail in the Royal College of Physicians' Consultant physicians working for patients resource on the speciality. A recent article in this journal 10 discussed how we identify older people with frailty and related syndromes and presentations, and the key importance and evidence behind expert, holistic multidisciplinary assessment, treatment and follow up (comprehensive geriatric assessment). 11 Readers are referred back to that piece and to a number of recent resources and clinical reviews on care for patients with frailty. 12-14 These describe our core patient group - the one for whom we make the biggest difference - and the basis of our speciality's skill.

Principles of good practice around care for older people have been set out in the RCP *Acute care toolkit*, ¹⁵ the 'Silver Book' on urgent care for older people, written by several colleges and specialist societies, ¹⁶ in major King's Fund reports ^{17–19} and by Health Improvement Scotland ²⁰ among other bodies. A consensus has emerged about 'what good looks like' and how we need to change. Geriatricians, specialist acute physicians and emergency department consultants are unusual in being defined more by a group of patients, a phase of illness and

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a range of common presentations than by system or organ diseases. Though they may have been seen by some as 'poor relations' these 'expert generalism' specialities are crucial in making pressurised modern acute hospitals work. ^{21,22}

Given that frailty, dementia, multiple comorbidities, post-acute rehabilitation, discharge planning and end-of-life care 'travel with' a range of patients in adult medicine, it is increasingly important that all clinicians in adult care gain some competencies in this area and shift approaches for the older population they are now dealing with. The RCP's *Acute care toolkit*, ¹⁵ *Hospitals on the edge*, ²³ *Future Hospital: caring for medical patients* ²⁴ and *Hospital workforce fit for the future* ²⁵ all acknowledged that our current models, skills and values must change to reflect the increasingly old and complex nature of modern hospital case mix.

Future Hospital exemplar sites are focusing on the care of older people. ²⁶ Both NHS Benchmarking ²⁷ and the King's Fund ¹⁹ have outlined major variation in practice, activity and outcomes around hospital care of older people. Initiatives such as the Future Hospital and the Acute Frailty Clinical Network, ²⁸ and work of NHS Emergency Care Intensive Support Team ²⁹ focusing on dissemination and adoption of best practice, all aim to embed these approaches. UK consultants in several major 'organ specialities' are often lengthily trained, dually accredited general physicians. ^{7,25} However, the number of consultants described as purely 'general (internal) medicine' has diminished. ^{30,31}

Against this background, the evidence base for specialist care and interventions for specific conditions has grown to the extent that it's much harder for a jobbing generalist to do as well as an expert specialist for specific single conditions. In England, waiting time targets, financial incentives and an understandable demand for separate 'speciality rotas' alongside acute general medicine have put additional pressure on GiMaccredited specialists to focus on their 'ology'. This can leave them pulled in different directions, trying to satisfy needs around acute inpatient care and other work, and sometimes feeling they'd be better leaving, stopping or reducing their commitment to acute or inpatient GiM. This arguably runs against the RCP current push to have more trainees doing more GiM during training. ^{24,25}

The principle focus of this article is on the current and future role of geriatricians and geriatrics, with some reference to our relationships with acute and general medicine. We have written it from a geriatrician's perspective, though are GiM trained and many contribute substantially to all-age GiM and acute medicine.

What roles can geriatricians play?

The range of clinical and service leadership activities played by geriatricians has expanded along with our numbers, increasing demand, changing patient demographic and a growing evidence base for our craft. Further expansion may have been a consequence of some other disciplines' flight from old fashioned general medicine and the acute take and the contraction of standalone 'general medicine' posts. We contribute variously to the following; however, the list is not exhaustive, with some geriatricians contributing to specialist areas such as bone fragility or continence services for instance.

Contribution to GiM and the 'unselected take'

- Geriatricians often provide a disproportionate contribution to the acute unselected GiM take, regardless of patient age; in a few (usually larger) hospitals there are separate acute medicine and acute geriatric service. Geriatrics contributes 12% of acute general medicine workforce in the UK.^{7,30} Geriatricians are well trained in GiM. Many enjoy and value it though as with other specialities there is a range of interest levels. However, looking after younger non-frail patients could potentially distract from our core mission of caring for older people with frailty and complex needs.
- 2. A number of geriatricians work as acute physicians³¹ and some with 'triple accreditation'. In these roles they can add value to the hospital 'front door' and help improve geriatric medicine practice and protocols across all acute medical unit services.
- 3. Leadership and service delivery in stroke medicine: Much of the improvement drive, service development and evidence base in stroke medicine, including stroke units, supported discharge and acute stroke services, has been driven by geriatricians. 32–34 We provide around 60% of all stroke services (for young and old) and approximately 60% of stroke consultants come from a geriatric medicine background. These clinicians have actively chosen stroke medicine and many continue in general medicine or geriatrics alongside this. However, busy stroke work inevitably limits their capacity for these other roles. Many stroke patients are older people with complex needs, making a geriatric medicine background useful.

Acute assessment and intervention for older people with frailty

- 4. Acute geriatrics or acute frailty medicine working in the emergency department (ED)^{35,36}, medical acute medical unit^{37,38} or co-located in acute frailty units.^{10,15,28,39} In these roles we identify older people with frailty and initiate early comprehensive geriatric assessment. We work closely with multidisciplinary teams including nurses, therapists, social workers discharge coordinators and voluntary organisations to facilitate early discharge home or to community services. These models sometimes access 'discharge to assess' teams, community 'in reach' or 'pull' teams to expedite discharge and ongoing support as soon as patients are sufficiently 'medically fit' (not the same as 'back to baseline'). In some units, 'interface geriatricians' work across the acute/community care divide. ^{40,41}
- 5. Rapid-access chair-based access clinics for older people the geriatric medicine equivalent of ambulatory care clinics in acute medicine (with some overlaps). Such clinics with same or next-day access to specialist 'one stop' assessment have been used successfully to divert patients away from busy and distressing ED and can be used at scale. 42,43
- 6. Acute inpatient care beyond the front door. The evidence base for comprehensive geriatric assessment is strongest for speciality ward based care.¹¹ Ward moves add to length of stay and worsen continuity.⁴⁴ Outlying patients even under the same team tend to stay longer.⁴⁵ Despite some limited successes with specialist older peoples liaison teams visiting 'outlying' wards for advice on complex older patients,^{46,47}

a principle of 'discharge to assess' (back home close to the front door) or 'decide to admit' to the first ward first time is a good one. A relentless focus on discharge planning, minimising internal and external delays, with geriatricians consistently involved has been shown to reduce bed occupancy, with secondary improvements to other outcomes. 17,29,49–53

Managing frailty as a long-term conditions

- 7. General and specialist outpatient work. Outside of community, rapid-access ambulatory clinics and stroke/ transient ischaemic attack clinic geriatricians do still deliver outpatient work, though not at the scale of many organspecialist colleagues. Indeed, it may not always be in the best interests of older people with frailty, dementia or disability to be bringing them for repeated outpatient follow-up. Geriatric medicine has led the way in developing the evidence-base and service models for falls clinics which assess patients and refer on for further intervention; 54–56 though the sheer number of patients who fall repeatedly means that such models are unlikely to reach most of those at risk without major investment. ^{57,58} Some geriatricians have developed syncope clinics⁵⁹ or specialist fracture liaison services.^{57,58} Many geriatricians offer specialist movement disorders and Parkinson's disease clinics for older patients and fill a clear need and gap in doing so for patients who have become older and frailer. 60-62
- 8. Specialist dementia, delirium and mental health services for older people. A high proportion of hospital inpatients have dementia, delirium, depression or other mental health problems. 63–65 There has been continual improvement in the care of such inpatients including a focus on delirium management and prevention 66,67 and on older peoples' mental health liaison teams. 68,69 Old-age psychiatry plays a key and often leading role (with geriatricians continuing to 'own' delirium more). Memory clinics and outpatient or community dementia services are largely run by old-age psychiatry in the UK but geriatricians are involved in a number of service models.

Liaison with other services

- 9. Orthogeriatrics. The typical hip fracture patient is over 80, usually with a history of falls or bone fragility, frailty and often complicated by delirium, dementia and poor mobility. There has been a revolution in the care of these patients over the past decade driven by the National Hip Fracture Audit, best practice tariff and a quality improvement movement co-driven by the BGS and British Orthopaedic Association. ^{57,70} A range of benefits has arisen. ⁷⁰ Geriatricians are key to such models and there is enough work in big district hospitals to keep one or two of them busy all year. ⁷¹ They also often oversee rehabilitation of inpatients with non-hip fractures and input into assessment of patients in fracture clinics for falls and bone health risk.
- 10. Geriatric–surgical models or proactive care of older people undergoing surgery. Following the gains described for hip fracture patients, a growing number of geriatricians are involved in joint working with anaesthetists and surgeons

- around preoperative assessment and perioperative care of older people undergoing surgery. Interest in such models is growing. ^{72,73}
- 11. Geriatricians with oncology or palliative care. Palliative care is key to geriatricians' work and some have subspecialised in this. There is also a small but growing band of geriatricians involved in multidisciplinary support and comprehensive geriatric assessment for frail older people undergoing cancer treatment.^{74,75}

Geriatricians as clinical champions

- 12. Geriatricians as system and service leaders. 9,14,17,18,22,76
 Geriatricians are often well placed for local clinical leadership roles. They interact daily with community health and social care systems as post-acute rehabilitation, discharge planning or admission prevention are central to their roles, and they are likely to have a whole system view and relevant relationships with community partners. We also see a large percentage of the medical take and hold a high number of beds, so are well placed to offer solutions around targets, delays, patient flow or readmission.
- 13. Geriatricians as safety champions. Many of the biggest safety incidents in hospital affect older people most. ^{17,77} Not just falls, ⁷⁸ but pressure sores, hospital-acquired infections, drug errors or poorly planned discharges. Other harms of hospitalisation, such as immobility or delirium or loss of personhood and independence, are not usually recorded as safety incidents but they're all too common. ^{79–81} Movements such as the BGS/Health Foundation 'Frail Safe' project⁸² or the Scottish OPAC work²⁰ aim to identify patients at highest risk and reduce these harms.
- 14. Geriatricians as educators and awareness-raisers. Given that geriatricians, specialist nurses, therapists, mental health practitioners or general practitioners (GPs) working with them can never see every frail older patient, yet such patients are to be found throughout adult medicine and surgery, we have a key role to educate and inform to ensure that colleagues have sufficient skills and information to improve their care and experience of hospitalisation.

Geriatricians in 'hospital without walls' roles: community geriatrics

15. Although a number of specialists (eg diabetologists) now provide care to patients in the community, as well as in hospitals, community geriatricians constitute the largest group of consultants working in the community. 9,40,83 In some cases these roles may include improving healthcare for care home residents, as set out in recent BGS guidelines. 84,85 This work can help reduce admissions from care homes or facilitate earlier return to them. $^{86-88}$ They also work in community hospitals (where length of stay and outcomes are still very variable), both on wards and clinics; provide support to intermediate care and integrated locality teams, including crisis teams, falls response teams and virtual wards, for high-risk patients and support to GPs and community nurses (eg via telephone advice or home visits). 14,17,89 In some parts of England, geriatricians are at the forefront of discussions with clinical commissioning groups regarding how such roles may develop into 'new

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modes of care', 90 working with other providers of patients care to provide a seamless pathway of support for frail older people (whether in or out of hospital) when specialist expertise is required.

How 'new geriatrics' fits in with acute medicine and the RCP's push to review GiM: a suggested way forward

Population ageing has changed modern hospital case mix for good. ^{10,15,17–19,22–24} Patients with frailty, falls, dementia, delirium, declining mobility and functional impairment, polypharmacy and multiple comorbidities are now 'core business'. Most acutely ill older patients require skilled rehabilitation and discharge planning, and are at risk of decompensation and disability if exposed to prolonged hospitalisation. ^{50,76,91,92,93}

The median age of acutely admitted patients is 71 and one-quarter of all bed days in English hospitals are in over 80s. In addition, 80% of all those staying in hospital over 14 days are over 65. ^{16,17,93,94} Spend on acute care rises proportionately with patient age. ⁹⁵ One month, urgent re-admissions in over 75s now run at around 15%. ^{96–98} Delayed transfers of care to step down health or social care facilities are rising with the majority of their clients being older. ⁹⁹ Increasing numbers of patients are admitted from nursing homes. ^{17,86}

With major pressure on hospital beds, big interhospital variation in admission rates and bed occupancy in over 65s and over 80s receiving the highest proportion of acute spend, ^{18,19,95} we can't solve system problems without focusing our efforts far more on older, complex patients.

The UK is fortunate and unique in having geriatric medicine as the biggest GiM speciality. However, it is clear that without a substantial increase in training numbers (bizarrely and unaccountably recently reduced for our specialty despite high numbers of new or unfilled consultant posts)¹⁰⁰ and in funded consultant posts (many of which lay unfilled now despite being, alongside acute medicine, the most advertised) that geriatricians cannot look after every older patient with frailty.

We are also fortunate in having so many specialists who are dually accredited and highly trained in GiM. In turn, GiM is in effect largely acute medicine or acute geriatrics for the urgent 'front door' phase of care, with few other patients left who don't fit more or less within one 'organ speciality' – though those patients often have a range of complex comorbidities requiring GiM or geriatric medicine skills. We tend to get annoyed at the assertion that 'we are all geriatricians now' merely because other specialists look after older patients. However, we do believe that alongside the expert workforce we need the rest to be adequately skilled and aware of the specific needs of older patients.

Of course, training and accreditation is one thing. Having doctors who really value and enjoy these elements of patient care is another. ^{22,101} Too often, even in our system where salary scales are national and not speciality specific, they have been seen as less prestigious. This has to change as they are the key to unlocking whole systems of care. However, geriatric medicine requires access to and close to collaboration with a full multidisciplinary team, with a strong component around post-acute rehabilitation, discharge planning and comprehensive geriatric assessment. It also requires adequate access to community health and care services to prevent admission and

facilitate earlier discharge. Such services are still not sufficiently available. By having this capacity, by a relentless focus on front door, early specialist review, rapid patient turnaround, minimising delays and seeing discharge and rehabilitation as core activities, and by having more specialists like geriatricians working across community interfaces, we could start to focus hospital activity more consistently on those patients who need specialist bedded acute care. This is likely to create bigger gains than a narrow focus on admission prevention as a holy grail.

Alongside this, our workforce planning should ideally increase the number of geriatricians and acute physicians, ensure some workforce flexibility so that some roles traditionally played by consultants might be taken up by skilled nurse practitioners, allied health professionals or GPs with a special interest. The Joint Royal Colleges Training Board is currently consulting on proposals following the Shape of Training review and General Medical Council proposals on generic competency training for future physicians. 102,103 This gives us a golden opportunity to re-align education and training along the lines we have set out. It will also be necessary in future workforce modelling by organisations such as Health Education England, to shift towards these new models to plan for medical manpower across primary and secondary care in localities and the nursing and allied health professional workforce required to support them. 104,105

However, the training and values of all physicians in acute medicine must reflect the needs of the ageing population, with person-centred rather than disease-centred care, and a whole pathway rather than hospital-centred approach. Continuity should be provided by 'expert generalism'.

The future of any speciality or service model is subject to events and policy decisions none of us can predict. We feel the future of geriatric medicine in the UK remains secure. However, rapid population ageing, the desire to shift models of care closer to home and re-imagine primary care, and a desire to revive 'expert generalism' in acute and secondary care mean that everyone in adult medicine will have to acquire some degree of skill in the assessment and management of older people with frailty and complex needs, leaving geriatricians to focus on those patients for whom their skills add the most value. Meanwhile, when we talk about reviving general medicine, we need a growing realisation that in the future its core business will be acute internal and geriatric medicine.

Conflict of interest Statement

Both authors are consultants trained in geriatric and GiM, fellows of RCP London and trustees of the BGS. Neither have any commercial conflict of interest.

References

- Office for National Statistics. *Interim life tables*, 2008–2010. Newport: ONS, 2011.
- 2 Office for National Statistics. Life expectancy at birth and at age 65 for local areas in England and Wales, 2010–12. Newport: ONS, 2013.
- 3 Wise J. Number of oldest old has doubled in the past 25 years. BMI 2010:340:3057.
- 4 House of Lords. 'Ready for ageing?' Select committee on public service and demographic change. Report of session 2012–13. HL Paper 140. London: Stationery Office, 2013.

- 5 Oliver D. The British Geriatrics Society at 60. Pulborough: British Society of Gerontology, 2008. Available online at www.britishgerontology.org/DB/gr-editions-2/generations-review/the-britishgeriatrics-society-at-60.htmll [Accessed 11 December 2015].
- 6 Barton A, Mulley G. History of the development of Geriatric Medicine in the UK. Postgrad Med J 2003;79:229–34.
- 7 Royal College of Physicians of London. *Census of consultant physicians and medical registrars*. London: RCP, 2012.
- 8 Mulley G. *Geriatric medicine defined*. London: British Geriatrics Society, 2010.
- 9 Wyrko Z. Geriatric Medicine. In: Royal College of Physicians, Consultant physicians working for patients. London: RCP, 2013; 119–125
- 10 Wyrko Z. Frailty at the front door. Clin Med 2015;4;377-81.
- Ellis G, Whitehead M, Robinson D, O'Neill D, Langhorne P. Comprehensive geriatric assessment for older adults admitted to hospital: meta-analysis of randomised controlled trials. *BMJ* 2011;343:d6553.
- 12 Clegg A, Young J, Iliffe S, Rikkert M, Rockwood K. Frailty in elderly people. *Lancet* 2013;381:752–62.
- 13 British Geriatrics Society, Age UK and RCGP. Fit for frailty II. London: BGS, 2014.
- 14 NHS England. Safe, compassionate care for frail older people, using an integrated care pathway. NHS England: London, 2013.
- 15 Royal College of Physicians London. *Acute care toolkit 3: acute medical care for frail older people.* London: RCP, 2012.
- 16 British Geriatrics Society. Quality care for older people with urgent & emergency care needs 'Silver Book'. London: BGS, 2012.
- 17 Oliver D, Foot C, Humphries R. Making health and care systems fit for an ageing population. London: The Kings Fund, 2014.
- 18 Cornwell J. The care of frail older people with complex needs: time for a revolution. London: The King's Fund, 2011.
- 19 Imison C, Poteliakhoff E, Thompson J. Older people and emergency bed use: exploring variation. London: The King's Fund, 2012.
- 20 HealthCare Improvement Scotland. Care of Older People in Hospital. Glasgow: HCIS, 2015.
- 21 Firth J. The future of general medicine. Clin Med 2014;4:354-6.
- 22 Oliver D. Transforming care for older people in hospital. physicians must embrace the challenge. Clin Med 2012;12:230–4.
- 23 Royal College of Physicians. Hospitals on the edge? The time for action. London: RCP, 2012.
- 24 Royal College of Physicians. Future hospital: caring for medical patients. A report from the Future Hospital Commission to the Royal College of Physicians. London: RCP, 2013.
- 25 Royal College of Physicians. Hospital workforce: fit for the future. London: RCP, 2013.
- 26 Royal College of Physicians. Future Hospitals Programme. Year 1 reflections. London: RCP, 2015.
- 27 NHS Benchmarking. Older people in acute care settings. London: 2015. Available online at www.nhsbenchmarking.nhs.uk/ CubeCore/.uploads/NHSBNOPReport2014Circ.pdf [Accessed 11 December 2015].
- 28 Conroy S. The acute frailty network. Solutions for urgent care for older people. Available online at https://britishgeriatricssociety. wordpress.com/2015/03/19/the-acute-frailty-network-solutionsfor-urgent-care-for-older-people/ [Accessed 11 December 2015].
- 29 Emergency Care Intensive Support Team. Effective approaches in urgent and emergency care: priorities within acute hospitals. London: NHS Emergency Care Intensive Support Team, 2011.
- 30 Royal College of Physicians of London. Consultant census 2013– 14. Executive summary. London: RCP, 2014.
- 31 Dowdle R. Specialities. Acute internal medicine and general internal medicine. Consultant physicians working for patients. London: RCP, 2013:17–25
- 32 Langhorne P, Holmqvist L. Early supported discharge after stroke. *J Rehabil Med* 2007;39:103–8.

- 33 Newton H. Specialities. Stroke medicine. Consultants physicians caring for patients. London: RCP, 2013:255–61.
- 34 Royal College of Physicians. Specialities. Stroke medicine. London: RCP. 2013.
- 35 Conroy S, Ansari K, Williams M et al. A controlled evaluation of comprehensive geriatric assessment unit in the Emergency Department: the emergency frailty unit. Age Ageing 2014;43:109–14.
- 36 Conroy S, Chikura G. Emergency care for frail older people urgent AND important. But what works? Age Ageing 2015:44:724–5.
- 37 OO MT, Tencheva A, Khalid N et al. Assessing frailty in the acute medical admission of older patients. J R Coll Physicians Edinburgh 2013;43:301–8.
- 38 Richards J, Shamel K, Stirling S. 'The RACE unit: rapid access and consultant evaluation' in abstracts of work presented to the BGS Autumn Scientific meeting. London: BGS, 2013.
- 39 Baztan JJ, Suarez-Garcia FM et al. Efficiency of acute geriatric units: a metaanalysis of controlled studies. Rev Esp Geriatr Gerontol 2011;46:186–92.
- 40 The King's Fund. Eileen Burns. Leeds Interface Geriatrics Service. London: The Kings Fund, 2014. Available online at www.kingsfund. org.uk/audio-video/eileen-burns-leeds-interface-geriatrician-service [Accessed 11 December 2015].
- 41 Gladman J, Kearney F, Ali A et al. Medical crises in older people.

 Discussion paper. The role of the interface geriatrician. Nottingham:
 University of Nottingham, 2012.
- 42 Lasserson D. Acute medicine at the interface of primary and secondary care. Brighton: Presentation at the BGS Autumn Scientific Meeting, 2014. Available online at www.bgs.org.uk/powerpoint/ aut14/lasserson_acute_interface.pdf [Accessed 11 December 2015].
- 43 Koduah D, Inegbenebor D, Ambepitiya J. Reducing inappropriate admissions of older people into acute hospitals: The role of a rapid access clinic in a community hospital. *Age Ageing* 2014;43(suppl 1):i3.
- 44 McMurdo M, Witham M 'Unnecessary ward moves'. Age Ageing 2013;42:555–6.
- 45 NHS England. Safer, faster, better. Transforming urgent and emergency care services in England. London: NHS England. 2015.
- 46 Harari D, Martin FC, Buttery A, O'Neill S, Hopper A. The Older Persons Assessment and Liaison Team "OPAL": evaluation of comprehensive geriatric assessment in medical inpatients. *Age Ageing* 2007;36:6770–5.
- 47 Nair S, Jhani B, Dickenson E. Translation evaluation of the OPAL acute care model. *Age Ageing* 2009;38 (suppl 1):i14.
- 48 Philp I. The principles behind integrated care for older people. HSJ, 30 November 2012. Available online at www.hsj.co.uk/topics/integration/the-principles-behind-integrated-care-for-older-people/5051571.fullarticle [Accessed 11 November 2015].
- 49 NHS improving Quality. Re-designing acute care for frail older people seven days a week. SO who said seven day services have to be more expensive. Leeds: NHSIQ, 2013.
- 50 Silvester K, Mohammed M, Harriman P et al. Timely care for frail older people referred to hospital improves efficiency and reduces mortality without the need for extra resources. Age Ageing 2013:10:1093.
- 51 Health Foundation. *Unblocking a hospital in gridlock. South Warwickshire NHS Foundation Trusts experience of flow, cost quality.* London: Health Foundation, 2013.
- 52 Health Foundation. 'Frail older people'. London: Health Foundation, 2012.
- 53 Health Foundation. *Improving patient flow: how two trusts focused on flow to improve the quality of care and use available capacity effectively.* London: Health Foundation, 2013.
- 54 National Institute for Health and Care Excellence. Falls. Assessment and prevention of falls in older people. CG161. London: NICE 2013.

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- 55 Gillespie L, Robertson M, Gillespie W et al. Interventions for preventing falls in older people living in the community (Review). Cochrane Database Syst Rev 2012;9:CD007146.
- 56 Royal College of Physicians. Falling standards, broken promises. National clinical audit. London: RCP, 2010.
- 57 Oliver D, Willett K. Falls, fragility and fractures. Lessons from the last decade and opportunities for the next. Osteoporosis Rev Winter 2011;19.
- 58 Age UK and National Osteoporosis Society. Breaking through. Building better falls and fractures services in England. Report for the Minister of State for Care Services. NOS: Bath, 2012.
- 59 Kenny RA, O'Shea D, Walker HF. Impact of a dedicated syncope and falls facility for older adults on emergency beds. *Age Ageing* 2002;31:272–5.
- 60 Parkinsons UK. National Parkinson's Audit Report 2011. London: Parkinsons UK, 2012.
- 61 Skelly R, Brown L, Fakis A. Hospitalisation in Parkinson's disease. *Parkinsonism Relat Disord* 2015;21:277–81.
- 62 British Geriatrics Society. Parkinson's disease. London: BGS, 2007.
- 63 Alzheimer's Society. Counting the cost. Caring for older people with dementia on hospital wards. London: Alzheimer's Society, 2010.
- 64 Royal College of Psychiatrists. *National audit of dementia care in general hospital 2012–13. Second round audit report and update.*London: RCPsych Centre for Quality Improvement, 2013.
- 65 Royal College of Psychiatrists. Who cares wins. Improving the outcome for older people admitted to the general hospital. London: RCPsych, 2005.
- 66 National Institute for Health and Care Excellence. Delirium. Diagnosis, prevention and management. CG103. London: NICE, 2010.
- 67 Health Care Improvement Scotland. Improving the care for older people. Delirium toolkit. Glasgow: HCIS, 2014.
- 68 NHS Confederation. *Liaison psychiatry the way ahead.* London: NHS Confederation, 2012.
- 69 Royal College of Psychiatrists. Liaison psychiatry and the management of long-term conditions and medically unexplained symptoms. London: RCPsych, 2012.
- 70 Physicians Royal College of. Falls and fragility fractures audit programme. National hip fracture database report 2014. London: RCP, 2014.
- 71 Hudson H, Hepherd R, Ruckledge A. Orthogeriatrics. *Geriatric Med*, May 2013 Available online at www.gmjournal.co.uk/orthogeriatrics_79995.aspx [Accessed 11 December 2015].
- 72 Dhesi J. Setting up a proactive service to make surgery safer for older people. London: Health Foundation, 2013.
- 73 Association of Anaesthetists of Great Britain and Ireland. Peri-operative care of the elderly. London: AAGBI, 2014.
- 74 Macmillan Cancer Support, Age UK and Department of Health. *Cancer services coming of age.* London: Age UK, 2012.
- 75 Gosney M. Geriatric oncology. Age Ageing 2009;38:644–5.
- 76 Health Service Journal. Commission on frail older people in hospital. Main report. London: HSJ, 2015.
- 77 Special edition: Older people. Clinical Risk. 2012;18:83–121 (All articles relevant).
- 78 Oliver D, Healey F, Haines T. Preventing falls and falls-related injuries in hospitals. In: Ganz D, Rubenstein L (eds) Ganz D, Clinics in Geriatric Medicine. Amsterdam: Elsevier, 2010.
- 79 Kortebein P, Symons TB, Ferrando A et al. Functional impact of 10 days of bed rest in healthy older adults. J Gerontol 2008;63A:1076–81.
- 80 Knight J, Nigam Y, Jones A. Effects of bedrest: 1: cardiovascular, respiratory and haematological systems. *Nursing Times* 2009;105:16–20.
- 81 Knight J, Nigam Y, Jones A Effects of bedrest 2: gastrointestinal, endocrine, renal, reproductive and nervous systems. *Nursing Times* 2009;105:24–7.

- 82 British Geriatrics Society. Frail Safe. A new safety checklist for the acute care of frail older people. BGS Blog. 23 November, 2013.
- 83 Shepperd S. How community geriatricians are the linchpins of elder care. HSJ, 25 June 2009.
- 84 British Geriatrics Society. Commissioning guidance for high quality health care for older care home residents. London: BGS, 2013.
- 85 British Geriatrics Society. Quest for quality British Geriatrics Society joint working party inquiry into the quality of healthcare support for older people in care homes: a call for leadership, partnership and quality improvement. London: BGS, 2011.
- 86 Quality Watch. Focus on hospital admissions from care homes. London: Nuffield Trust and Health Foundation, 2015.
- 87 Lisk R. Hospital admissions from care homes. BGS Blog, 13 March 2015. At https://britishgeriatricssociety.wordpress. com/2015/03/13/hospital-admissions-from-care-homes/
- 88 Roberts S. Reducing hospital admissions. A new integrated model for care homes. *BGS Blog*, 29 July 2015
- 89 NHS Benchmarking. National audit of intermediate care. Summary report 2014. London: NHS Benchmarking, 2014.
- 90 NHS England. New care models: vanguard sites. London: NHS England. Available online at www.england.nhs.uk/ourwork/futurenhs/5yfv-ch3/new-care-models/ [Accessed 11 December 2015].
- 91 Mudge A, Kasper K, Clair A et al. Recurrent readmissions in medical patients: a prospective study. J Hosp Med 2011;6: 61–7.
- 92 Kleinpell R Fletcher K, Jennings B. Reducing functional decline in hospitalised elderly. In: Hughes RG (ed), Patient safety and quality: an evidence-based handbook for nurses. Rockville, MD: Agency for Healthcare Research and Quality, 2008.
- 93 Hubbard R, O'Mahony S, Cross E et al. The ageing of the population. Implications for multidisciplinary care in hospital. Age Ageing 2004;33:479-82.
- 94 Thompson J. Data briefing. Emergency bed use. What the numbers tell us. London: The Kings Fund, 2011.
- 95 Nuffield Trust. Public spending on healthcare in England per age adjusted person. London: Nuffield Trust, 2015.
- 96 NHS Confederation and Foundation Trust Network. Briefing. The impact of non-payment for readmissions. London. NHS Confederation, 2011.
- 97 Health and Social Care Information Centre. Readmissions. Health and Social Care Information Centre portal. Leeds: HSCIC, 2012.
- 98 Conroy S, Dowsing T. What should we do about hospital readmissions? *Age Ageing* 2012;41:702–4.
- 99 The King's Fund. *Delayed transfers of care. Quarterly monitoring report 14.* London: The King's Fund, January 2015.
- 100 Wyrko Z. Geriatric medicine workforce update. BGS Newsletter, Sep 2015
- 101 Centre for Policy on Ageing. Ageism and age-discrimination in secondary care in the United Kingdom: a review from the literature. London: CPA, 2009.
- 102 Joint Royal Colleges Training Board. A flexible curriculum for internal medicine. A proposal. London: JRCTP, 2015.
- 103 General Medical Council. Development of generic professional capabilities. Consultation. London: GMC, 2015.
- 104 Health Education England. Workforce planning guidance 2015/2016. Leeds: Health Education England, 2015.
- 105 Dowdle R. Acute internal medicine and general internal medicine. In: Royal College of Physicians, Consultant physicians working for patients. London: RCP, 2013.

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